Reviewer’s report

Title: Paroxysmal extreme pain disorder in family with c.3892G>T (p.Val1298Phe) in the SCN9A gene mutation - case report

Version: 1 Date: 21 Jan 2020

Reviewer: Bouchra Ouled Amar Bencheikh

Reviewer's report:

comment#1:
The authors should report the genes names in Italic (title, abstract, main text and references). The manuscript does not mention the reference sequence(s). The authors should report gene and mutation according to HGVS Recommendations.

comment#2:
The authors should mention that the mutation is known and reported in CLINVAR Database with rs number and is reported as pathogenic in PERD.

comment#3:
No details given about the method or genetic testing used to identify the mutation (NGS, Sanger.....).

comment#4:
figure with mutation should be added to show the mutation (Sanger chromatogram for example)

comment#5:
In figure 5: show only the pedigree, the legend should be modified to pedigree of the family, or symbols should be added to highlight individuals with genetic data. Also, the number of generation and patients should be added to the pedigree and mentioned in the manuscript when you describe any patient. for example (patient V.1 and patient VI.4 were investigated....)

comment#6:
authors should add more details about gene SCN9A and mutations involved in PERD

comment#7:
The mutation is already described in PERD and authors did not mention this information.

comment#8:
In the lines: 172, 173: "the word "unanimity" should be substituted by another word to qualify the sentence.

comment#9:
instead of:
The "
157 disease is associated with the occurrence of a mutation in the SCN9A gene located in the 2q24.3 chromosome responsible for the construction of the alpha subunit of the potential-dependent NaV1.7 sodium channels. These channels occur in peripheral somatic and visceral sensory nerves, nociceptoras, dorsal roots of the spinal cord, trigeminal ganglion, olfactory cells and sympathetic ganglion"
authors should write
"The
157 disease is associated with the occurrence of "mutations" in the SCN9A gene located in the 2q24.3 chromosome coding for alpha subunit of the potential-dependent NaV1.7 sodium channels. These channels are mainly expressed in peripheral somatic and visceral sensory nerves, nociceptoras, dorsal roots of the spinal cord, trigeminal ganglion, olfactory cells and
sympathetic ganglion"

"From the diversity of symptoms and different genetic origins, a clinical diagnosis of PEPD might encompass different entities. For example, erythema and burning pain in the lower parts of the body, more classically a primary erythromelalgia description, is harbouring the M1627K mutation [9]. As far as the diversity of symptoms and different genetic origins are concerned, a clinical diagnosis of PEPD might encompass different entities.

patient information missing, the patient belong to the family investigated ? the symptoms are symptoms seen in the family or litterature

"Symptoms of PEPD occur throughout the entire life of a patient...."

"Later, a patient remains..."

references are missing for some sentences in the introduction and discussion.

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

No

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Unable to assess

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

Yes

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

Not relevant to this manuscript

Quality of written English
Please indicate the quality of language in the manuscript:

Acceptable

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